Name: ....   Class: ....   Class No: ....

QUESTION # 1 *(2 X 10 = 20 Marks)*
Fill in the blanks of the following table.

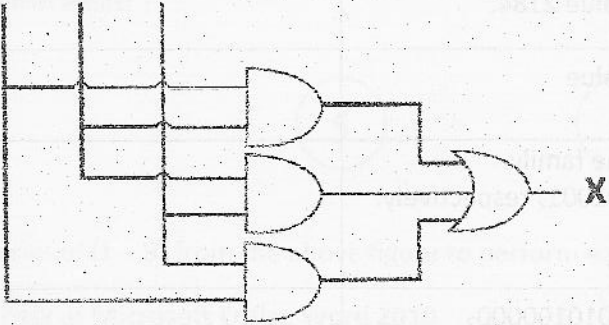|	Question	Answer
1	What is the range of the values in the Hexadecimal Number System?	
2	Find the binary equivalent of the decimal value 2184.	
3	Find the decimal equivalent of the binary value 11000011010011111_2.	
4	Kamala, Anula and Manjula are sisters in one family. Their ages are 1001110_2, 1001100_2 and 1001001_2 respectively. Who is the eldest sister in this family? What is her age in decimal number system?	
5	If, $10111001100011000_2 + X_{10} = 11000011010100000_2$ Find the value of X.	
6	What is the base value of the Octal Number System?	
7	Suranga has written a word using binary code of 7-bit ASCII system as given below. 1010000 1000101 1010100 Hint: 7-bit ASCII value of the letter "Z" is 1011010 in binary. What is the word written by Suranga?	
8	Find the number of bits in one Yottabyte as a power of two.	
9	How many different characters are there in the Unicode Coding System?	
10	The capacity of Thushara's external hard disk is 2^{23} MB. If, 2^{23} MB = X TB. Find the value of X.	

QUESTION # 2 *(20 Marks)*

Fill in the blanks of the following table.

	Question	Answer
1	What are the three basic logic operations in Boolean Algebra? *(1 X 3 = 3 Marks)*	
2	Write the Boolean function of the following logic circuit. *(4 Marks)*	
3	Design the logic circuit for the following Boolean Function; *(5 Marks)* $$F = \overline{A} + \overline{B}.\overline{C} + B.C$$	
4	Fill in the blanks of the following truth table. *(2 X 4 = 8 Marks)*	

X	Y	NOT(NOT(X AND Y) AND NOT(X OR Y))
0	0	
0	1	
1	0	
1	1	

DE MAZENOD COLLEGE, KANDANA
GENERAL INFORMATION TECHNOLOGY (GIT)
02nd Term Test 2019   Grade 13   Time: 02 Hours

Answer all the questions on this paper itself.

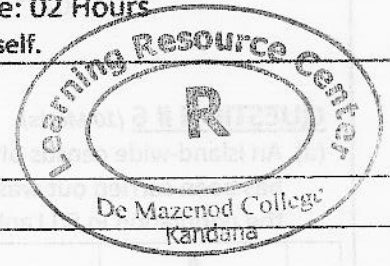## QUESTION # 3 (2 X 5 = 10 Marks)
Fill in the blanks of the following table.

	Question	Answer
1	Write down two names of Free and Open Source Electronic Spreadsheet Software.	
2	The number of columns in Microsoft Excel 2010 is 2^x. Find the value of x.	
3	The number of rows in Microsoft Excel 2010 is 2^y. Find the value of y.	
4	What is the default alignment of a text entered in a cell in Microsoft Excel 2010?	
5	What is the default alignment of a number entered in a cell in Microsoft Excel 2010?	

QUESTION # 4 (2 X 5 = 10 Marks)
Find the results of the following equations in Microsoft Excel 2010 and fill in the blanks of the table.

	Formula	Result
1	= 5+2*3^2/6-3	
2	= ((2+2^2)^2)^(1/2)	
3	=(10^2-8^2)/2^0	
4	= (((500 - 20*5)^2)/100)/0.5	
5	=(10^5-200^2)/1000*5/10^2	

QUESTION # 5 (2 X 5 = 10 Marks)
Study the following worksheet and fill in the blanks of the following table under the 'result' column.

	A	B	C
1	2	6	4
2	5	3	7
3	5	9	12

	Formula	Result
1	= SUM(A1:A3,C1:C3)	
2	= AVERAGE(A1:C1,B2)	
3	=MAX(A1:C2,B3,A3,C3)	
4	=MIN(A1:A3,B1:B3,C1:C3)	
5	=(COUNT(A1:A3,C1:C3) + 4)^2	

QUESTION # 6 (10 Marks)

(a) An island-wide census of population in Sri Lanka was conducted in 2011. The last time such a census has been carried out was in 1981. The following is an extract from a table that compares the changes in the population in Sri Lanka between 1981 and 2011.

	A	B	C	D	E
1	Population in Sri Lanka				
2	District	Population		Population growth in 30 years	
3		1981	2011	Number	Percent
4	Colombo	1,675,847	2,323,826		
5	Gampaha	1,367,813	2,298,588		
6	Kalutara	823,964	1,214,880		
7	Kandy	1,032,335	1,368,216		
8	Matale	352,860	482,348		
9	Nuwara Eliya	583,716			
20	Anuradhapura	575,546	855,562		
21	Polonnaruwa	253,411	403,859		
22	Badulla	620,839	811,225		
23	Monaragala	269,684	448,194		
24	Ratnapura	779,927	1,082,299		
25	Kegalle	678,456	837,179		
26	Total Population				
27	Population in the least populous district				

Source: Department of Census and Statistics, Sri Lanka

(2 X 3 = 6 Marks)

	Question	Answer
1	Write down the formula necessary for cell C26 to calculate the total population in Sri Lanka in 2011 using an in-built function in Excel.	
2	Write down the formula necessary for cell E5 to calculate the percentage increase in the population in Gampaha district between 1981 and 2011.	
3	Write down the formula necessary for cell C27 to display the population in the least populated district in Sri Lanka in 2011 using an in-built function in Excel.	

(b) Sales values in each shop of a supermarket chain during the first six months of 2018 are given in the following table.

(2 X 2 = 4 Marks)

	A	B	C	D	E	F	G	H	I
1	Sales in Rs. millions								
2	Shop	January	February	March	April	May	June	Total sales	Commission (Rs)
3	Badulla	4	4	8	12	9	6		
4	Colombo	20	25	22	40	32	28		
5	Galle	12	14	15	26	22	18		
6	Jaffna	6	8	10	18	14	12		
7	Kandy	18	21	23	36	30	25		
8	Trincomalee	8	12	14	31	22	16		

	Question	Answer
1	What is the formula that should be written in cell H3 to calculate the total sales value for the shop at Badulla using an in-built function in Excel?	
2	If 5% of total sales for the past six months are allocate as the commission for the staff in each shop, write down the formula necessary for cell I3 to calculate the sales commission for the staff of the shop at Badulla.	

QUESTION # 7 *(2 X 5 = 10 Marks)*

Check whether the following statements are true or false.

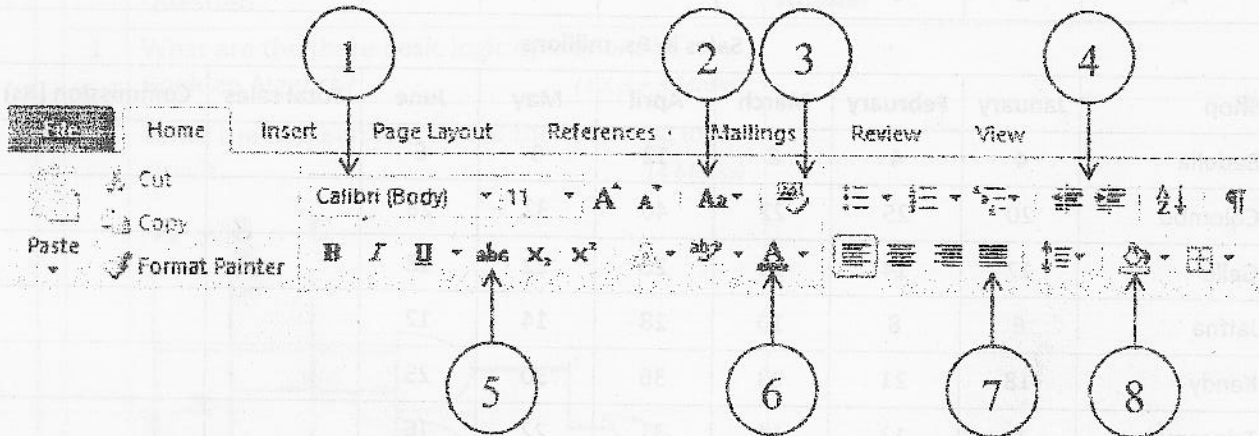|	Statement	True / False
1	LyX is a Word Processing Software.	
2	The user can create documents using internet, although the computer does not have Word Processing software.	
3	You do not need to remember complex commands as all commands are displayed in a menu or ribbon in Microsoft Office Word.	
4	The extension of a database created using Microsoft Access 2010 is .accbd	
5	Mail merge facility is not available in Microsoft Office Word 2010.	

QUESTION # 8 *(2 X 5 = 10 Marks)*

This is the Home Ribbon of Microsoft Office Word 2010.

Find the label (1 – 8) from the above figure to perform each task of the following table.

	Task in Microsoft Office Word 2010	Label
1	Changing the font colour	
2	Justify alignment of a paragraph.	
3	Indentation	
4	Change Case	
5	Changing the Font name (font face)	